

What is claimed is:

1. A binding device comprising:

binding rings;

a holding member having such a length that allows the  
5 binding rings to be provided at a distance; and

an operating member movably fixed inside the holding  
member so that the respective bases of the binding rings are  
secured onto a surface of the operating member at a distance  
to secure the binding rings to the holding member, wherein

10 the operating member is composed of a pair of operating  
pieces moving within the holding member in a longitudinal  
direction of the holding member;

the base of one of the binding rings is secured to one of  
the operating pieces, whereas the base of the other binding  
15 ring is secured to the other operating piece;

the operating pieces are fixed to the holding member so  
that abutting edges thereof are kept in an abutting state at a  
position separate from an inner face of the holding member  
when the binding rings are closed, whereas the abutting edges  
20 are kept in a direction of approaching the inner face of the  
holding member when the binding rings are opened; and

an opening/closing member is provided for shifting the  
binding rings in an opening direction such that the operating  
pieces are moved in the longitudinal direction of the holding  
25 member within the holding member and are kept in a direction

of approaching the inner face of the holding member when the binding rings are opened.

2. The binding device according to claim 1, wherein the holding member includes holding walls formed parallel to a longitudinal direction, and the operating member has outer edges sliding inside the holding walls.

3. The binding device according to claim 2, wherein the operating member includes a pair of operating pieces sliding within the holding member in a longitudinal direction of the holding member;

the pair of operating pieces have outer edges sliding in the longitudinal direction of the holding member in their longitudinal direction and abutting edges for allowing the pair of operating pieces to abut against each other on inner edges parallel to the outer edges.

4. The binding device according to any one of claims 1 to 3, wherein

the opening/closing member is made of an elastic member, and

the elastic member is provided between a pair of operating pieces constituting the operating member to diagonally cross a direction connecting the bases of the binding rings secured to the operating pieces at a distance so as to move the pair of operating pieces in directions opposite to each other and to keep an opened/closed state of the

binding rings.

5. The binding device according to claim 4, wherein  
the opening/closing member is made of an elastic member,  
and

5 the elastic member is provided to bridge between the pair  
of operating pieces constituting the operating member so that  
one end of the elastic member is fixed to one of the operating  
pieces and the other end thereof is fixed to the other  
operating piece.

10 6. The binding device according to claim 5, wherein  
the opening/closing member is made of an elastic member,  
and

the elastic member is provided to bridge between the pair  
of operating pieces constituting the operating member so that  
15 one end of the elastic member is fixed to a surface of one of  
the operating pieces, the surface being opposite to a face  
where the bases of the binding rings are fixed and the other  
end thereof is fixed to a surface of the other operating piece,  
the surface being opposite to the face where the bases of the  
20 binding rings are fixed.

7. The binding device according to claim 4, wherein  
the opening/closing member is made of an elastic member,  
one end of the elastic member is fixed to one of the  
operating pieces constituting the operating member, and  
25 the other end thereof is fixed to the holding member

across the other operating piece constituting the operating member.

8. The binding device according to any one of claims 1 to 7, wherein

5 the holding member has holding walls formed parallel to a longitudinal direction;

the opening/closing member is made of an elastic member extending in a longitudinal direction;

one end of the opening/closing member is fixed to an  
10 inner side of one of the holding walls of the holding member, whereas the other end of the opening/closing member is fixed to an inner side of the other holding wall facing the holding wall of the holding member at a distance in the longitudinal direction of the holding member, the opening/closing member  
15 further extends to cross the one operating piece fixed to the one holding wall side to reach the other operating piece abutting against the one operating piece to be retained thereby and then from a position retained by the one operating piece across an abutting portion between the pair of operating  
20 pieces to the other operating piece so as to be retained by the other operating piece.

9. The binding device according to claim 8, wherein

the opening/closing member is made of an elongated elastic member;

25 one end of the opening/closing member is fixed to a first

fixing portion on an inner side of a first holding wall of one of the holding walls of the holding member, whereas the other end is fixed to a second fixing portion on an inner side of a second holding wall of the other of the holding walls facing  
5 and being parallel to the first holding wall of the holding member at an equal distance from a center of the operating pieces in a longitudinal direction to that from the center to the first fixing portion; the opening/closing member further extends across a first operating piece of one of the operating  
10 pieces in an approximately rectangular shape fixed to the one holding wall side to a second operating piece of the other of the operating pieces abutting against the first operating piece so as to be retained by a fourth fixing portion of the second operating piece so as to be slightly shifted from a  
15 line passing through the first fixing portion to perpendicularly cross a moving direction of the second operating piece in the moving direction of the second operating piece when a first binding ring and a second binding ring of the binding rings are disengaged; and  
20 the opening/closing member further extends from the fourth fixing portion to the first operating piece across longitudinal abutting edges between the first operating piece and the second operating piece to be retained by a third fixing portion of the first operating piece so as to be  
25 slightly shifted from a line passing through the second fixing

portion to perpendicularly cross a moving direction of the first operating piece in the moving direction of the first operating piece when the first binding ring and the second binding ring are disengaged, thereby forming the

5 opening/closing member in an approximately letter Z shape.

10. The binding device according to any one of claims 4 to 9, wherein

the elastic member is selected from the group consisting of a coil spring, a torsion spring, a flat spring, an  
10 elongated rubber, and an elongated urethane rubber.